11. For a free charge q inside the metal strip with velocity $\vec{v}$ we have $\vec{F} = q\left(\vec{E} + \vec{v} \times \vec{B}\right)$. We set this force equal to zero and use the relation between (uniform) electric field and potential difference. Thus,

$$v = \frac{E}{B} = \frac{\left|V_x - V_y\right| / d_{xy}}{B} = \frac{\left(3.90 \times 10^{-9}\,\text{V}\right)}{\left(1.20 \times 10^{-3}\,\text{T}\right)\left(0.850 \times 10^{-2}\,\text{m}\right)} = 0.382\,\text{m/s}.$$